



CAMEO Chemicals

Chemical Data Sheet

Chemical Name: STRONTIUM SULFIDE

Section 1 - Chemical Identifiers

CAS Number	UN/NA Number	STCC Number	CHRIS Code
1314-96-1	none	none	none

DOT Hazard Label: data unavailable

NFPA 704

Blue - Health Hazard -
Red - Flammability -
Yellow - Reactivity -
White - Special -

General Description

PHYSICAL DESCRIPTION: Gray powder with an odor of H₂S in moist air. (NTP, 1992)

Section 2 - Hazards

Reactivity Alerts

none

Air & Water Reactions

Slowly releases H₂S in moist air.

Fire Hazard

No information available.

Health Hazard

ACUTE/CHRONIC HAZARDS: Irritant to skin and tissue. Moderate fire hazard and explosion risk. (NTP, 1992)

Reactivity Profile

STRONTIUM SULFIDE reacts vigorously with acids to release hydrogen sulfide gas. May react exothermically with oxidizing agents including inorganic oxoacids, organic peroxides and epoxides, and inorganic peroxides to generate toxic gases. (REACTIVITY, 2003)

Belongs to reactive group(s)

- Sulfides, Inorganic

Section 3 - Response Recommendations

Fire Fighting

A fire in your laboratory involving this chemical should be extinguished with a dry chemical, carbon dioxide or halon extinguisher. (NTP, 1992)

Non-Fire Response

SMALL SPILLS AND LEAKAGE: If you spill this chemical, you should dampen the solid spill material with 5% acetic acid, then transfer the dampened material to a suitable container. Use absorbent paper dampened with 5% acetic acid to pick up any remaining material. Your contaminated clothing and the absorbent paper should be sealed in a vapor-tight plastic bag for eventual disposal. Wash all contaminated surfaces with 5% acetic acid followed by washing with a strong soap and water solution. Do not reenter the contaminated area until the Safety Officer (or other responsible person) has verified that the area has been properly cleaned.

STORAGE PRECAUTIONS: You should store this material in a refrigerator. (NTP, 1992)

Protective Clothing

RECOMMENDED RESPIRATOR: Where the neat test chemical is weighed and diluted, wear a NIOSH-approved half face respirator equipped with an organic vapor/acid gas cartridge (specific for organic vapors, HCl, acid gas and SO₂) with a dust/mist filter.

RECOMMENDED GLOVE MATERIALS: Permeation data indicate that butyl rubber gloves may provide protection to contact with this compound. Butyl rubber over latex gloves is recommended. However, if this chemical makes direct contact with your gloves, or if a tear, hole or puncture develops, remove them at once. (NTP, 1992)

First Aid

EYES: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. **IMMEDIATELY** transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.

SKIN: **IMMEDIATELY** flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. If symptoms such as redness or irritation develop, **IMMEDIATELY** call a physician and be prepared to transport the victim to a hospital for treatment.

INHALATION: **IMMEDIATELY** leave the contaminated area; take deep breaths of fresh air. **IMMEDIATELY** call a physician and be prepared to transport the victim to a hospital even if no symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used; if not available, use a level of protection greater than or equal to that advised under Protective Clothing.

INGESTION: Some heavy metals are **VERY TOXIC POISONS**, especially if their salts are very soluble in water (e.g., lead, chromium, mercury, bismuth, osmium, and arsenic). **IMMEDIATELY** call a hospital or poison control center and locate activated charcoal, egg whites, or milk in case the medical advisor recommends administering one of them. Also locate Ipecac syrup or a glass of salt water in case the medical advisor recommends inducing vomiting. Usually, this is **NOT RECOMMENDED** outside of a physician's care. If advice from a physician is not readily available and the victim is conscious and not convulsing, give the victim a glass of activated charcoal slurry in water or, if this is not available, a glass of milk, or beaten egg whites and **IMMEDIATELY** transport victim to a hospital. If the victim is convulsing or unconscious, do not give anything by mouth, assure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. **DO NOT INDUCE VOMITING.** **IMMEDIATELY** transport the victim to a hospital. (NTP, 1992)

Section 4 - Physical Properties**Molecular Formula:** SSr

Flash Point: data unavailable

Lower Explosive Limit: data unavailable

Upper Explosive Limit: data unavailable

Auto Ignition Temperature: data unavailable

Melting Point: > 3632 ° F (NTP, 1992)

Vapor Pressure: data unavailable

Vapor Density: data unavailable

Specific Gravity: 3.7 at 59.0 ° F (NTP, 1992)

Boiling Point: data unavailable

Molecular Weight: 119.68 (NTP, 1992)

Water Solubility: data unavailable

AEGL: data unavailable

ERPG: data unavailable

TEEL: data unavailable

IDLH: data unavailable

TLV TWA: data unavailable

TLV STEL: data unavailable

Section 5 - Regulatory Information**Regulatory Names**

No information available.

CAA RMP: Not a regulated chemical.**CERCLA:** Not a regulated chemical.**EPCRA 302 EHS:** Not a regulated chemical.**TRI (EPCRA 313):** Not a regulated chemical.**RCRA chemical code:** none

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CAMEO Chemicals is an online library of more than 6,000 data sheets containing response-related information and recommendations for hazardous materials that are commonly transported, used, and/or stored in the United States. CAMEO Chemicals also contains the Chemical Reactivity Worksheet (in the Predict Reactivity section of this site), which you can use to predict potential reactive hazards between chemicals of concern.

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- **CAMEO Chemicals:** An online version of the chemical database and reactivity tool that are part of the CAMEO program.
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Restoration

- Environmental Protection Agency (EPA) Office of Emergency Management
- U.S. Coast Guard (USCG) Research and Development Center

Information about each chemical was compiled from a variety of documents and databases, each prepared by a different organization. The following source abbreviations are used in the chemical data sheets:

- **(49CFR)** - Code of Federal Regulations, Title 49 Part 172. Transportation. 2003. Washington, D.C.: U.S. Government Printing Office.
- **(AAR, 2003)** - Association of American Railroads. 2003. Emergency Handling of Hazardous Materials in Surface Transportation. Washington, D.C.: Bureau of Explosives.
- **(AEGL, 2003)** - National Advisory Committee for AEGLs. 2003. Online at www.epa.gov/opptintr/aeagl.
- **(AIHA, 2003)** - American Industrial Hygiene Association. 2003. Emergency Response Planning Guidelines and Workplace Environmental Exposure Level Guides Handbook. Fairfax, Virginia: AIHA Press (can be ordered from www.aiha.org).
- **(CAS, 2003)** - Chemical Abstract Service. 2003. Formulas and CAS numbers. Electronic file. Seattle: Hazardous Materials Response Division, National Oceanic and Atmospheric Administration.
- **(DOT, 2000)** - U.S. Department of Transportation. 2000. Emergency Response Guidebook. Neenah, Wisconsin: J. J. Keller & Associates. Online at hazmat.dot.gov/pubs/erg/guidebook.htm.
- **(EPA, 1998)** - U.S. Environmental Protection Agency. 1998. Extremely Hazardous Substances (EHS) Chemical Profiles and Emergency First Aid Guides. Washington, D.C.: U.S. Government Printing Office.
- **(NFPA, 2002)** - National Fire Protection Association. 2002. Hazardous Chemicals Data. In: Fire Protection Guide to Hazardous Materials, 12th Ed. NFPA 49-1991. Quincy, Massachusetts: NFPA (can be ordered from www.nfpa.org).
- **(NIOSH, 2003)** - National Institute of Occupational Safety and Health. 2003. Pocket Guide to Chemical Hazards. Washington, D.C.: U.S. Government Printing Office. Online at www.cdc.gov/niosh/npg/pgintrod.html.
- **(NOAA, 2003)** - Information generated by NOAA, Office of Response and Restoration.
- **(NTP, 1992)** - National Toxicology Program, Institute of Environmental Health Sciences, National Institutes of Health. 1992. National Toxicology Program Chemical Repository Database. Research Triangle Park, North Carolina: NTP.
- **(REACTIVITY, 2003)** - Information generated by NOAA, Office of Response and Restoration, during the development of the Chemical Reactivity Worksheet.
- **(TEEL, 2005)** - Department of Energy, Subcommittee on Consequence Assessment and Protective Actions (DOE SCAPA). Online at orise.orau.gov/emi/scapa/teels.htm.
- **(Title III, 1998)** - U.S. Environmental Protection Agency. October 1998. Title III List of Lists. Consolidated List of Chemicals Subject to Reporting Under the Emergency Planning and Community Right-to-Know Act and Section 112(r) of the Clean Air Act. EPA 550-8-01-003. Washington, D.C.: U.S. Government Printing Office.
- **(USCG, 1999)** - U.S. Coast Guard. 1999. Chemical Hazard Response Information System (CHRIS) - Hazardous Chemical Data. Computer tape. Washington, D.C.: U.S. Government Printing Office. Online at www.chrismanual.com.

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References

The following source references were used in developing the reactivity section of this site:

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